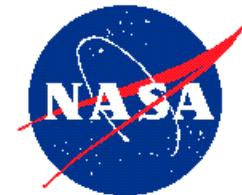


Smart Eyes: A New Robotic Vision System

Triangle R&D Corporation
Research Triangle Park, NC



INNOVATION

Determine position and orientation of bar code target using machine vision system.

ACCOMPLISHMENTS

- ◆ Developed software and algorithms to determine position and orientation of bar code target.
- ◆ Developed special target label.
- ◆ Developed software to control robot actions based on vision system input.

COMMERCIALIZATION

- ◆ U.S. DOT SBIR Phase I & II built on this technology to develop a vision system to assess Soft Tissue Damage Assessment System (STDAS) - \$324K.
- ◆ Sales to date - \$200K
- ◆ Licensed technology to First Technology Safety Systems (largest producer of crash dummies) to evaluate lacerations and contusions in simulated car crashes

GOVERNMENT/SCIENCE APPLICATIONS

- ◆ Space applications include robotic assembly of Space Station.
- ◆ Injury potential research tool for quantifying soft tissue damage potential.
- ◆ Warehousing and parts inventory.

Goddard Space Flight Center

1987 Phase 2, SS021, 3/3/98



***Soft Tissue Damage
Assessment System
(STDAS)***

Point of Contact:

- NASA - John Vranish; 301-286-4031
- Triangle - Richard McKinney; 919-832-5959